

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM 11-K

ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 1997.

OR

TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____.

Commission file number 1-13105.

- A. Full title of the plan and the address of the plan, if different from that of the issuer named below: Ashland Coal, Inc. Employee Thrift Plan.
- B. Name of issuer of the securities to be held pursuant to the plan and the address of its principal executive office: Arch Coal, Inc., CityPlace One, Suite 300, St. Louis, Missouri, 63141.

FINANCIAL STATEMENTS AND EXHIBITS

Financial Statements and Schedules

Report of Independent Auditors
Statements of Net Assets Available for Benefits
Statement of Changes in Net Assets Available for Benefits
Notes to Financial Statements
Schedule of Assets Held for Investment Purposes
Schedule of Reportable Transactions

Exhibits

23 - Consent of Ernst & Young LLP, independent auditors

Financial Statements
and Schedules

Ashland Coal, Inc. Employee
Thrift Plan

Year Ended December 31, 1997
with Report of Independent Auditors

Ashland Coal, Inc. Employee Thrift Plan

Financial Statements
and Schedules

Year Ended December 31, 1997

Contents

Financial Statements

Report of Independent Auditors.....	1
Statements of Net Assets Available for Benefits.....	2
Statement of Changes in Net Assets Available for Benefits.....	4
Notes to Financial Statements	5

Schedules

Schedule of Assets Held for Investment Purposes.....	13
Schedule of Reportable Transactions	14

Report Of Independent Auditors

To the Administrator
Ashland Coal, Inc. Employee Thrift Plan

We have audited the accompanying statements of net assets available for benefits of the Ashland Coal, Inc. Employee Thrift Plan as of December 31, 1997 and 1996, and the related statement of changes in net assets available for benefits for the year ended December 31, 1997. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan at December 31, 1997 and 1996, and the changes in net assets available for benefits for the year ended December 31, 1997, in conformity with generally accepted accounting principles.

Our audits were performed for the purpose of forming an opinion on the basic financial statements taken as a whole. The accompanying supplemental schedules of assets held for investment purposes as of December 31, 1997 and reportable transactions for the year then ended are presented for purposes of complying with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 and are not a required part of the basic financial statements. These supplemental schedules are the responsibility of the Plan's management. The Fund Information in the statements of net assets available for benefits and the statement of changes in net assets available for benefits is presented for purposes of additional analysis rather than to present the net assets available for benefits and changes in net assets available for benefits of each fund. The supplemental schedules and Fund Information have been subjected to the auditing procedures applied in our audits of the basic financial statements and, in our opinion, are fairly stated in all material respects in relation to the basic financial statements taken as a whole.

June 25, 1998

/s/ Ernst & Young LLP

Ashland Coal, Inc. Employee Thrift Plan

Statements of Net Assets Available for Benefits, with Fund Information

December 31, 1997

TOTAL	ARCH COAL INC. COMMON STOCK FUND	ASHLAND INC. COMMON STOCK FUND	AMERICAN CENTURY- TWENTIETH CENTURY GROWTH FUND	AMERICAN CENTURY- TWENTIETH CENTURY ULTRA FUND	AMERICAN CENTURY- TWENTIETH CENTURY VISTA FUND	
ASSETS						
Cash	\$ 10,643	\$ 169	\$ --	\$ --	\$ 60	\$ 46
Investments						
Common stock	1,787,075	1,787,075	--	--	--	--
Mutual funds	14,479,466	--	--	2,308,311	3,111,522	1,769,150
Common trust funds	12,179,030	--	--	--	--	--
Participant notes receivable	425,998	--	--	--	--	--
Total investments	28,871,569	1,787,075	--	2,308,311	3,111,522	1,769,150
Receivables						
Participant	137,092	7,628	--	15,533	19,950	14,931
Employer	89,679	4,990	--	10,161	13,050	9,767
Total receivables	226,771	12,618	--	25,694	33,000	24,698
Net assets available for benefits	\$29,108,983	\$1,799,862	\$ --	\$2,334,005	\$3,144,582	\$1,793,894

TABLE CONTINUED

	AMERICAN CENTURY BALANCED FUND	AMERICAN CENTURY- BENHAM INTERMEDIATE- TERM GOVERNMENT FUND	AMERICAN CENTURY VALUE FUND	AMERICAN CENTURY- TWENTIETH CENTURY INTERNATIONAL GROWTH FUND	BARCLAYS EQUITY INDEX	BENHAM STABLE VALUE GOVERNMENT FUND	PARTICIPANT LOAN FUND
ASSETS							
Cash	\$ 2,732	\$ 1,801	\$ 65	\$ 48	\$ 2,904	\$ 2,818	\$ --
Investments							
Common stock	--	--	--	--	--	--	--
Mutual funds	1,339,714	696,763	3,843,262	1,410,744	--	--	--
Common trust funds	--	--	--	--	3,429,359	8,749,671	--
Participant notes receivable	--	--	--	--	--	--	425,998
Total investments	1,339,714	696,763	3,843,262	1,410,744	3,429,359	8,749,671	425,998
Receivables							
Participant	7,394	3,716	16,831	11,040	18,140	21,929	--
Employer	4,837	2,431	11,010	7,222	11,866	14,345	--
Total receivables	12,231	6,147	27,841	18,262	30,006	36,274	--
Net assets available for benefits	\$1,354,677	\$704,711	\$3,871,168	\$1,429,054	\$3,462,269	\$8,788,763	\$425,998

SEE ACCOMPANYING NOTES.

Ashland Coal, Inc. Employee Thrift Plan

Statements of Net Assets Available for Benefits, with Fund Information

December 31, 1996

TOTAL	ARCH COAL INC. COMMON STOCK FUND	ASHLAND INC. COMMON STOCK FUND	AMERICAN CENTURY- TWENTIETH CENTURY GROWTH FUND	AMERICAN CENTURY- TWENTIETH CENTURY ULTRA FUND	AMERICAN CENTURY- TWENTIETH CENTURY VISTA FUND
ASSETS					
Cash	\$ 9,733	\$ 9,702	\$ 31	\$ --	\$ --
Investments					
Common stock	2,760,011	2,466,531	293,480	--	--
Mutual funds	12,397,552	--	--	1,971,847	2,542,921
Common trust funds	9,400,967	--	--	--	--
Participant notes receivable	275,501	--	--	--	--
Total investments	24,834,031	2,466,531	293,480	1,971,847	2,542,921
Receivables					
Participant	100,962	3,703	--	8,283	11,229
Employer	43,419	1,588	--	3,557	4,848
Total receivables	144,381	5,291	--	11,840	16,077
Net assets available for benefits	\$24,988,145	\$2,481,524	\$293,511	\$1,983,687	\$2,558,998

TABLE CONTINUED

AMERICAN CENTURY BALANCED FUND	AMERICAN CENTURY- BENHAM INTERMEDIATE- TERM GOVERNMENT FUND	AMERICAN CENTURY VALUE FUND	AMERICAN CENTURY- TWENTIETH CENTURY INTERNATIONAL GROWTH FUND	BARCLAYS EQUITY INDEX	BENHAM STABLE VALUE GOVERNMENT FUND	PARTICIPANT LOAN FUND
ASSETS						
Cash	\$ --	\$ --	\$ --	\$ --	\$ --	\$ --
Investments						
Common stock	--	--	--	--	--	--
Mutual funds	1,100,293	859,030	2,798,170	1,125,353	2,335,542	--
Common trust funds	--	--	--	--	--	--
Participant notes receivable	--	--	--	--	--	275,501
Total investments	1,100,293	859,030	2,798,170	1,125,353	2,335,542	275,501
Receivables						
Participant	4,031	8,946	20,436	8,929	14,387	--
Employer	1,745	3,834	8,765	3,832	6,170	--
Total receivables	5,776	12,780	29,201	12,761	20,557	--
Net assets available for benefits	\$1,106,069	\$ 871,810	\$2,827,371	\$1,138,114	\$2,356,099	\$ 275,501

SEE ACCOMPANYING NOTES.

Ashland Coal, Inc. Employee Thrift Plan
Statement of Changes in Net Assets Available for Benefits, with Fund Information

Year Ended December 31, 1997

TOTAL	ARCH COAL INC. COMMON STOCK FUND	ASHLAND INC. COMMON STOCK FUND	AMERICAN CENTURY- TWENTIETH CENTURY GROWTH FUND	AMERICAN CENTURY- TWENTIETH CENTURY ULTRA FUND	AMERICAN CENTURY- TWENTIETH CENTURY VISTA FUND	AMERICAN CENTURY BALANCED FUND
Additions to net assets attributed to:						
Investment income						
Net appreciation (depreciation) in fair value of investments						
\$ 1,002,482	\$ (14,844)	\$ 39,773	\$ 218,296	\$ (35,164)	\$ (283,672)	\$ 56,299
Interest and dividend income						
2,622,668	36,120	6,253	344,812	642,650	108,296	133,315
3,625,150	21,276	46,026	563,108	607,486	(175,376)	189,614
Less investment management fees						
(2,186)	(87)	--	(256)	(282)	(253)	(93)
3,622,964	21,189	46,026	562,852	607,204	(175,629)	189,521
Contributions						
Participant						
1,956,462	102,943	--	213,696	284,458	219,799	95,492
Employer						
1,093,991	60,919	--	117,233	158,860	117,737	63,011
3,050,453	163,862	--	330,929	443,318	337,536	158,503
6,673,417	185,051	46,026	893,781	1,050,522	161,907	348,024
Benefits paid to participants						
(2,552,579)	(98,006)	(11,526)	(122,796)	(232,749)	(60,744)	(138,329)
Net increase (decrease) prior to transfers						
4,120,838	87,045	34,500	770,985	817,773	101,163	209,695
Interfund transfers (net)						
--	(768,707)	(328,011)	(420,667)	(232,189)	(321,048)	38,913
4,120,838	(681,662)	(293,511)	350,318	585,584	(219,885)	248,608
Net assets available for benefits						
Beginning of year						
24,988,145	2,481,524	293,511	1,983,687	2,558,998	2,013,779	1,106,069
End of year						
\$29,108,983	\$1,799,862	\$ --	\$2,334,005	\$3,144,582	\$1,793,894	\$1,354,677

TABLE CONTINUED

TOTAL	AMERICAN CENTURY- BENHAM INTERMEDIATE- TERM GOVERNMENT FUND	AMERICAN CENTURY VALUE FUND	AMERICAN CENTURY- TWENTIETH CENTURY INTERNATIONAL GROWTH FUND	BARCLAYS EQUITY INDEX	BENHAM STABLE VALUE GOVERNMENT FUND	PARTICIPANT LOAN FUND
Additions to net assets attributed to:						
Investment income						
Net appreciation (depreciation) in fair value of investments						
\$ 16,956	\$ 162,732	\$ 43,925	\$ 798,181	\$ --	\$ --	
Interest and dividend income						
39,873	622,898	196,974	--	462,181	29,296	
56,829	785,630	240,899	798,181	462,181	29,296	
Less investment management fees						
(93)	(232)	(161)	(266)	(463)	--	
56,736	785,398	240,738	797,915	461,718	29,296	
Contributions						
Participant						
42,899	233,079	145,963	234,164	383,969	--	
Employer						
29,869	119,992	78,888	134,195	213,287	--	
72,768	353,071	224,851	368,359	597,256	--	
129,504	1,138,469	465,589	1,166,274	1,058,974	29,296	
Benefits paid to participants						
(64,673)	(344,086)	(105,005)	(230,427)	(1,105,018)	(39,220)	
Net increase (decrease) prior to transfers						
64,831	794,383	360,584	935,847	(46,044)	(9,924)	
Interfund transfers (net)						
(231,930)	249,414	(69,644)	170,323	1,753,125	160,421	
(167,099)	1,043,797	290,940	1,106,170	1,707,081	150,497	

Net assets available
for benefits

Beginning of year

871,810

2,827,371

1,138,114

2,356,099

7,081,682

275,501

End of year

\$ 704,711

\$3,871,168

\$1,429,054

\$3,462,269

\$8,788,763

\$425,998

SEE ACCOMPANYING NOTES.

Ashland Coal, Inc. Employee Thrift Plan

Notes To Financial Statements

December 31, 1997

1. PLAN AMENDMENT AND DESCRIPTION OF PLAN

Pursuant to an April 4, 1997 Agreement and Plan of Merger among Ashland Coal, Inc., Arch Mineral Corporation, and AMC Merger Corporation (AMC) (a wholly-owned subsidiary of Arch Mineral), Arch Mineral's name was changed to Arch Coal, Inc. and Ashland Coal, Inc. merged with AMC effective July 1, 1997, thereby becoming a wholly-owned subsidiary of Arch Coal, Inc. On the effective date of the merger, the Ashland Coal, Inc. Employee Thrift Plan (the Plan) was amended to eliminate the Ashland Coal, Inc. Stock Fund and to provide for a new Arch Coal common stock investment option in its place. All outstanding Ashland Coal shares held in the Plan were automatically converted to Arch Coal stock. References herein to "the Company" relate to Ashland Coal prior to the merger and to Arch Coal after the merger.

The following description of the Plan provides only general information. Participants should refer to the summary plan description, copies of which are available from Arch Coal, for a more complete description of the Plan's provisions.

GENERAL

The Plan was established as a defined contribution plan covering eligible employees of the Company and its participating subsidiaries. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA).

CONTRIBUTIONS

Subject to applicable limitations, participating employees may contribute an amount up to 16 percent of their salaries or wages to the Plan, on either a before-tax or after-tax basis. Through July 31, 1997, the Company contributed an amount equal to 70 percent of the amount of "Basic Contributions" by plan participants. "Basic Contributions" are amounts contributed by employees up to 6 percent of their salaries or wages. Effective August 1, 1997, the Company "matching" contributions on "Basic Contributions" were increased to 100 percent of the first 6 percent contributed by the plan participants.

Ashland Coal, Inc. Employee Thrift Plan

Notes To Financial Statements (continued)

1. PLAN AMENDMENT AND DESCRIPTION OF PLAN (CONTINUED)

PARTICIPANT ACCOUNTS

The accounts of the Plan are maintained on the accrual basis of accounting. Contributions from employees and related employer contributions are recorded when the employer makes payroll deductions from Plan participants. Investment income (or loss), less investment management fees, is allocated to participants' accounts on the basis of each participant's proportionate interest in the fund. The value of the fund and the value of each participant's interest will fluctuate with the fair value of the securities in which the fund is invested.

VESTING

Participants are immediately vested in their contributions, as well as rollover contributions and any qualified Company contributions, plus actual earnings thereon. Matching Company contributions of participants first hired prior to August 1, 1996 are fully vested and non-forfeitable, but matching Company contributions of participants first hired on or after August 1, 1996 only become vested after the participant completes five years of continuous service.

INVESTMENT OPTIONS

Upon enrollment in the Plan, a participant may direct employer and employee contributions in any of the following investment options:

Arch Coal, Inc. Common Stock Fund	Funds invested in Arch Coal's common stock. This investment option became available to participants on July 1, 1997.
Ashland Coal, Inc. Common Stock Fund	Funds invested in Ashland Coal's common stock. This investment option was replaced by the above option on July 1, 1997.
Ashland Inc. Common Stock Fund	Funds invested in common stock of Ashland Inc. Effective December 31, 1997, this investment option was discontinued. Prior to year end, funds were reallocated based on individual instructions by the affected plan participants.

Ashland Coal, Inc. Employee Thrift Plan

Notes To Financial Statements (continued)

1. PLAN AMENDMENT AND DESCRIPTION OF PLAN (CONTINUED)

INVESTMENT OPTIONS (CONTINUED)

American Century - Twentieth Century Growth Fund	An equity mutual fund that seeks capital growth over time by investing in common stocks considered by American Century Services, Inc. (American Century), previously named Twentieth Century Services, Inc., to have better-than-average prospects for appreciation. Stocks in Growth's portfolio are not required to pay dividends.
American Century - Twentieth Century Ultra Fund	An aggressive equity mutual fund that seeks capital growth over time by investing in common stocks considered by American Century to have better-than-average prospects for appreciation. Ultra typically invests in medium-to-large sized companies.
American Century - Twentieth Century Vista Fund	An aggressive equity mutual fund that seeks capital growth over time by investing in common stocks considered by American Century to have better-than-average prospects for appreciation. Vista typically invests in small-to-medium sized companies.
American Century Balanced Fund	A balanced mutual fund that seeks capital growth and current income by investing approximately 60 percent of its assets in growth stocks and the remainder in fixed income securities. This combination of equity and fixed income investments is designed to provide investors with current income as they invest for growth.
American Century - Benham Intermediate-Term Government Fund	The mutual fund invests in securities issued by the U.S. government and its agencies, including mortgage-backed securities. The weighted average maturity of the fund is between three and ten years.
American Century Value Fund	A conservative equity mutual fund that seeks long-term capital growth. Income is a secondary objective. To pursue its objective, the fund invests primarily in equity securities of well-established companies that are believed by American Century to be undervalued at the time of purchase.

Ashland Coal, Inc. Employee Thrift Plan

Notes To Financial Statements (continued)

1. PLAN AMENDMENT AND DESCRIPTION OF PLAN (CONTINUED)

INVESTMENT OPTIONS (CONTINUED)

American Century - Twentieth Century International Growth Fund	The mutual fund seeks capital growth over time by investing in common stocks of foreign companies considered by American Century to have better-than-average prospects for appreciation. To find the best opportunities for growth, the fund spreads its investments across many countries and continents. The fund may invest in U.S. companies when circumstances warrant, but its primary purpose is to diversify investments across a broad range of overseas companies.
Barclays Equity Index	The common trust fund seeks the long-term capital appreciation potential of large capitalization Blue Chip stocks while minimizing risk through broad diversification. The fund invests in Barclays Equity Index Fund, a highly diversified portfolio of the stocks included in the Standard & Poor's 500 Composite Stock Price Index (S&P 500 Index).
Benham Stable Value Government Fund	The common trust fund seeks to provide current income, while maintaining a stable share price. The investment objective of the Benham Fund is to earn current income that is relatively consistent over time, while preserving capital and relative stability of principal, while investing exclusively in a diversified pool of fixed income obligations of the U.S. government and its agencies.

PARTICIPANT NOTES RECEIVABLE

Participants may borrow from their fund accounts a minimum of \$1,000 up to a maximum of the lesser of \$50,000 or 50 percent of their account balance. Loan transactions are treated as a transfer from (to) the investment fund to (from) the loan fund. Loan terms range from 1-5 years or up to 10 years for the purchase of a primary residence. The loans are secured by a lien on the participant's Plan accounts. Loans bear an interest rate of the prime rate in effect as of the first day of the month in which the loan was entered, plus 1 percent. Principal and interest is paid ratably through payroll deductions.

Ashland Coal, Inc. Employee Thrift Plan

Notes To Financial Statements (continued)

1. PLAN AMENDMENT AND DESCRIPTION OF PLAN (CONTINUED)

PAYMENT OF BENEFITS

On termination of service, a participant may receive a lump-sum amount equal to the value of the account, or upon death, disability or retirement, may elect to receive payment in optional payment forms which include installment payments, life annuities, or joint and survivor annuities.

PLAN TERMINATION

Although it has not expressed any intent to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of ERISA. In the event of a termination of the Plan, the Plan and related trust shall be continued until such time as all accounts have been fully distributed, at which time the Plan and trust shall terminate.

2. SUMMARY OF ACCOUNTING POLICIES

The financial statements of the Plan are prepared on the accrual basis of accounting.

INVESTMENT VALUATION AND INCOME RECOGNITION

Investments are stated at fair value. Securities traded on a national securities exchange are valued at the closing market price on the last business day of the plan year. The shares of mutual funds are valued at quoted market prices which represent the net asset values of shares held by the Plan at year-end. The fair value of the participation units owned by the Plan in common trust funds are based on quoted redemption values on the last business day of the Plan year. The participant notes receivable are valued at their outstanding balances, which approximate fair value. The cost of investments disposed of is determined on the basis of average historical cost.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.

USE OF ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Ashland Coal, Inc. Employee Thrift Plan

Notes To Financial Statements (continued)

3. INVESTMENTS

The Plan's investments are held by a bank administered trust fund and are presented in the following table.

	DECEMBER 31	
	1997	1996
	-----	-----
Investments at fair value determined by quoted market price:		
Common stock		
Arch Coal, Inc., 65,272 shares	\$ 1,787,075	\$ --
Ashland Coal, Inc., 88,884 shares	--	2,466,531
Ashland Inc., 6,689 shares	--	293,480
	-----	-----
	1,787,075	2,760,011
Mutual funds		
American Century-Twentieth Century Growth Fund, 96,140 and 90,121 shares, respectively	2,308,311	1,971,847
American Century-Twentieth Century Ultra Fund, 113,975 and 90,528 shares, respectively	3,111,522	2,542,921
American Century-Twentieth Century Vista Fund, 142,444 and 137,832 shares, respectively	1,769,150	1,999,938
American Century Balanced Fund, 73,854 and 63,748 shares, respectively	1,339,714	1,100,293
American Century-Benham Intermediate-Term Government Fund, 66,044 and 88,743 shares, respectively	696,763	859,030
American Century Value Fund, 552,987 and 424,609 shares, respectively	3,843,262	2,798,170
American Century-Twentieth Century International Growth Fund, 172,252 and 141,376 shares, respectively	1,410,744	1,125,353
	-----	-----
	14,479,466	12,397,552
Common trust funds		
Barclays Equity Index, 150,147 and 135,945 units, respectively	3,429,359	2,335,542
Benham Stable Value Government Fund, 8,749,671 and 7,065,425 units, respectively	8,749,671	7,065,425
	-----	-----
	12,179,030	9,400,967
Investments at estimated fair value:		
Participant notes receivable	425,998	275,501
	-----	-----
Total investments at fair value	\$28,871,569	\$24,834,031
	=====	=====

Ashland Coal, Inc. Employee Thrift Plan

Notes To Financial Statements (continued)

3. INVESTMENTS (CONTINUED)

During the year ended December 31, 1997, the Plan's investments (including investments bought, sold, as well as held during the year) appreciated in fair value as follows:

Investments at fair value determined by quoted market price:

Common stocks	\$	24,929
Mutual funds		179,372
Common trust funds		798,181

	\$	1,002,482
		=====

4. TAX STATUS OF THE PLAN

The Internal Revenue Service ruled on February 25, 1997 that the Plan qualifies under Section 401(a) of the Internal Revenue Code (IRC) and, therefore, the related trust is not subject to tax under present income tax law. Once qualified, the Plan is required to operate in conformity with the IRC to maintain its qualification. The Company is not aware of any course of action or series of events that have occurred that might adversely affect the Plan's qualified status.

5. TRANSACTIONS WITH PARTIES-IN-INTEREST

The Company engages the services of a third party service provider to assist it in carrying out certain administrative and record keeping functions under the Plan. All expenses of administering the Plan are paid by the Company. The Plan is not charged for administrative services performed on its behalf by the Company. The Plan has investments in the common stock of the sponsoring company as well as in mutual funds sponsored by the third party service provider of the Plan.

6. SUBSEQUENT EVENT

On January 1, 1998, Arch Coal merged three similar plans sponsored by Arch Coal and affiliated companies, including the Ashland Coal, Inc. Employee Thrift Plan, into the Arch Coal, Inc. Employee Thrift Plan. Effective with the merger of the plans, all Plan participants became fully vested in their participant accounts as the Arch Coal, Inc. Employee Thrift Plan provides for immediate vesting of matching Company contributions for Plan participants employed on or before December 31, 1997. Participants hired on or after January 1, 1998 are fully vested in their participant accounts, but will only become fully vested in the matching Company contribution account upon the completion of three full and consecutive years of service.

7. YEAR 2000 ISSUE (UNAUDITED)

The Company has developed a plan to modify its internal information technology to be ready for the year 2000 and has begun converting critical data processing systems. The project also includes determining whether third party service providers have reasonable plans in place to become year 2000 compliant. The Company currently expects the project to be substantially complete by the third quarter of 1999. The Company does not expect this project to have a significant effect on plan operations.

Schedules

Ashland Coal, Inc. Employee Thrift Plan
 EIN #61-0880012, Plan Number 010

Line 27a - Schedule of Assets Held for Investment Purposes

December 31, 1997

IDENTITY OF ISSUE, BORROWER, LESSOR OR SIMILAR PARTY	DESCRIPTION OF INVESTMENT, INCLUDING MATURITY DATE, RATE OF INTEREST, PAR OR MATURITY VALUE	COST	CURRENT VALUE
Common stocks:			
Arch Coal, Inc.	65,272 shares	\$ 1,706,569	\$ 1,787,075
Mutual funds:			
American Century-Twentieth Century Growth Fund*	96,140 shares	2,243,208	2,308,311
American Century-Twentieth Century Ultra Fund*	113,975 shares	3,138,419	3,111,522
American Century-Twentieth Century Vista Fund*	142,444 shares	2,077,016	1,769,150
American Century Balanced Fund*	73,854 shares	1,308,146	1,339,714
American Century-Benham Intermediate-Term Government Fund*	66,044 shares	681,536	696,763
American Century Value Fund*	552,987 shares	3,565,095	3,843,262
American Century-Twentieth Century International Growth Fund*	172,252 shares	1,389,266	1,410,744
		-----	-----
		14,402,686	14,479,466
Common trust funds:			
Barclays Equity Index	150,147 units	2,303,917	3,429,359
Benham Stable Value Government Fund	8,749,671 units	8,749,671	8,749,671
		-----	-----
		11,053,588	12,179,030
Participant loans	9-10%	--	425,998

			\$28,871,569
			=====

* Indicates Party-in-interest to the Plan

Ashland Coal, Inc. Employee Thrift Plan
 EIN #61-0880012, Plan Number 010

Line 27d - Schedule of Reportable Transactions

Year Ended December 31,1997

Identity of Party	Description of Assets	Purchase Price	Selling Price	Cost of Asset	Current Value of Asset on Transaction Date	Net Gain (Loss)
CATEGORY (III)--SERIES OF TRANSACTIONS IN EXCESS OF 5% OF PLAN ASSETS						
Ashland Coal, Inc.	Arch Coal, Inc. Common Stock	\$ 286,094	\$ --	\$ 286,094	\$ 286,094	\$ --
	Arch Coal, Inc. Common Stock	--	965,585	909,710	965,585	55,875
	Arch Coal, Inc. Common Stock	893,135	--	893,135	893,135	--
	Arch Coal, Inc. Common Stock	--	906,972	5,355	906,972	901,617
Ashland Inc.	Ashland Coal, Inc. Common Stock	201,166	--	201,166	201,166	--
	Ashland Coal, Inc. Common Stock	--	199,334	--	199,334	199,334
	Ashland Inc. Common Stock	--	341,369	140,890	341,369	200,479
American Century	American Century-Twentieth Century Growth Fund	860,443	--	860,443	860,443	--
	American Century-Twentieth Century Growth Fund	--	1,087,087	963,150	1,087,087	123,937
	American Century-Twentieth Century Ultra Fund	990,717	--	990,717	990,717	--
	American Century-Twentieth Century Ultra Fund	--	1,029,600	914,250	1,029,600	115,350
	American Century-Twentieth Century Vista Fund	834,626	--	834,626	834,626	--
	American Century-Twentieth Century Vista Fund	--	890,038	941,988	890,038	(51,950)
	American Century Balanced Fund	361,037	--	361,037	361,037	--
	American Century Balanced Fund	--	311,230	299,012	311,230	12,218
	American Century-Benham Intermediate-Term Government Fund	933,495	--	933,495	933,495	--
	American Century-Benham Intermediate-Term Government Fund	--	1,152,164	1,161,304	1,152,164	(9,140)
	American Century Value Fund	1,085,453	--	1,085,453	1,085,453	--
	American Century Value Fund	--	825,992	722,229	825,992	103,763
	American Century-Twentieth Century International Growth Fund	690,497	--	690,497	690,497	--
	American Century-Twentieth Century International Growth Fund	--	646,006	585,287	646,006	60,719
	Barclays Equity Index	1,227,267	--	1,227,267	1,227,267	--
	Barclays Equity Index	--	931,599	763,191	931,599	168,408
SEI Trust Company	Benham Stable Value Government Fund	4,240,290	--	4,240,290	4,240,290	--
	Benham Stable Value Government Fund	--	3,018,232	3,018,232	3,018,232	--

There were no category (i), (ii), or (iv) reportable transactions during 1997.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the duly authorized Plan Administrator has executed this annual report.

ARCH COAL, INC. EMPLOYEE
THRIFT PLAN (successor by merger
to the Ashland Coal, Inc. Employee
Thrift Plan)

By: /s/ Jeffry N. Quinn

Plan Administrator

Date: June 29, 1998

INDEX TO EXHIBITS

EXHIBIT

ITEM

23 Consent of Independent Auditors

CONSENT OF INDEPENDENT AUDITORS

We consent to the incorporation by reference in the Registration Statement (Form S-8 No. 333-32777) pertaining to the Arch Coal, Inc. Employee Thrift Plan of our report dated June 25, 1998, with respect to the financial statements and schedules of the Ashland Coal, Inc. Employee Thrift Plan included in this Annual Report (Form 11-K) for the year ended December 31, 1997.

/s/ Ernst & Young LLP

Louisville, Kentucky
June 25, 1998